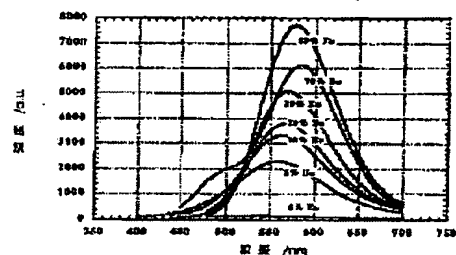


ACID NITRIDE PHOSPHOR ACTIVATED WITH RARE EARTH ELEMENT**Patent number:** JP2002363554**Publication date:** 2002-12-18**Inventor:** MITOMO MAMORU; ENDO TADASHI; UEDA KYOTA**Applicant:** NAT INST FOR MATERIALS SCIENCE**Classification:****- International:** C09K11/64; C04B35/599; C09K11/80**- european:****Application number:** JP20010171831 20010607**Priority number(s):** JP20010171831 20010607[Report a data error here](#)**Abstract of JP2002363554**

PROBLEM TO BE SOLVED: To provide an acid nitride phosphor activated with a rare earth element, which can realize a white LED with a higher luminance, using a blue LED as the light source.

SOLUTION: This phosphor is represented by the general formula: $\text{Mex Si}_{12-(m+n)} \text{Al}_{(m+n)} \text{O}_n \text{N}_{16-n} \text{Re}_1 \text{y Re}_2 \text{z}$, wherein a part or the whole of the metal(s) Me (Me is Ca, Mg, Y, or one or more of lanthanide metals except La and Ce) capable of forming a solid solution with α -sialon is substituted by lanthanide metal(s) Re1 (Re1 is one or more of Ce, Pr, Eu, Tb, Yb, and Er) serving as a luminescent center, or two kinds of lanthanide metals Re1 and a coactivator comprising Re2 (Re2 is Dy).



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